JFW

Dkt. 54203-H-PCT-US/JPW/AJM/NS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Peter D. Kwong et al.

Serial No. : 09/856,200

Filed : January 3, 2003

For : CRYSTAL COMPRISING HUMAN

IMMUNODEFICIENCY VIRUS ENVELOPE GLYCOPROTEIN GP120, COMPOUNDS INHIBITING CD4-GP120 INTERACTION, COMPOUNDS INHIBITING CHEMOKINE RECEPTOR-GP120 INTERACTION, MIMICS OF CD4 AND GP120

**VARIANTS** 

1185 Avenue of the Americas New York, New York 10036 November 2, 2004

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

## INFORMATION DISCLOSURE STATEMENT

In accordance with their duty of disclosure under 37 C.F.R. \$1.56 and 37 C.F.R. \$1.97, applicants would like to direct the Examiner's attention to the following publications which are listed on the attached Form PTO-1449 (Exhibit A). Copies of cited publications 1-8 are attached hereto as Exhibits 1-8 respectively.

1. Rini, James M. et al. Crystal structure of a human immunodeficiency virus type 1 neutralizing antibody, 50.1, in complex with its V3 loop peptide antigen. Proceedings of the National Academy of Sciences of the United States, Vol. 90, No. 13, 6325-6329 (1993); (Exhibit 1)

Applicants : Peter D. Kwong et al.

U.S. Serial No. : 09/856,200

Filed : January 3, 2003

Page 2

2. Ghiara, J.B. et al. Structure-based design of a constrained peptide mimic of the HIV-1 V3 loop neutralization site. Journal of Molecular Biology, Vol. 266, No. 1, 31-39 (1997); (Exhibit 2)

- 3. Stura, E.A. et al. Crystallization, Sequence and Preliminary Crystallographic Data For An Antipeptide FAB 50.1 and Peptide Complexes With The Principal Neutralizing Determinant of HIV-1 GP120. Proteins: Structure, Function, and Genetics, Vol. 14, No. 4, 499-508 (1992); (Exhibit 3)
- 4. Oxford, J.S. et al. New Scientific Developments Towards and AIDS Vaccine: report on a workshop organized by EU programme EVA entitled Novel approaches to AIDS vaccine development held at the Institut Pasteur, Paris. Vaccine, Vol. 14, No. 17, 1712-1717 (1996); (Exhibit 4)
- 5. Sanejouand, Y-H. On the role of CD4 conformational change in the HIV-cell fusion process. Comptes Rendus Des Seances De L'Academie Des Sciences. Serie III. Sciences De La Vie, Vol. 320, No. 2, 163-170 (1997); (Exhibit 5)
- 6. Wyatt, R. et al. The Antigenic Structure of the HIV gp120 Envelope Glycoprotein. Nature. Vol. 393, 705-711 (1998); (Exhibit 6)
- 7. Kwong, P. D. et al. Structure of an HIV gp120 Envelope Glycoprotein in Complex with the CD4 Receptor and a Neutralizing Human Antibody. Nature,

Applicants : Peter D. Kwong et al.

U.S. Serial No. : 09/856,200

Filed : January 3, 2003

Page 3

Vol. 393, 648-659 (1998); (Exhibit 7) and

8. Partial European Search Report, August 5, 2004 from European Patent Office on European Patent Application No. EP 98959406.4 (Exhibit 8).

Pursuant to 37 C.F.R. §1.97(b)(3) no fee is deemed necessary in connection with the filing of this Information Disclosure Statement. However, if any fee is required, authorization is hereby given to charge the amount of any such fee to Deposit Account No. 03-3125.

Respectfully submitted,

I hereby certify that this correspondence is being deposited this date with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Alan J. Morrison Reg. No. 37,399 John P. White
Registration No. 28,678
Alan J. Morrison
Registration No. 37,399
Attorneys for Applicants
Cooper & Dunham LLP
1185 Avenue of the Americas
New York, New York 10036
Tel. No. (212) 278-0400

								_	of Commerce lemark Office	Atty. Docket No. 54203-H-PCT-US /JPW/AJM/NS		Serial No. 09/856,200		
'Ilse several sheets if necessary)   mos											Applicants Peter D. Kwong et al.			
									NOV U S ZOUT	Filing Date Group January 3, 2003				
<u> </u>	τ		_						ATENT DOCUMENTS	T	Г	T		
xaminer nitial	_	Docu	ımen	t Ni	Imbe	r		Date	Name	Class	Subclass	Filing Date if Appropriate		
			-									-		
					<b> </b>			<u>.                                    </u>	·					
	-				1					<u> </u>				
	<u> </u>	<u> </u>	<u> </u>		<u> </u>			FOREIGN	PATENT DOCUMENT:	 S		<u> </u>		
		Document			Νυ	dm	er		Country	Class	Subclass	Translation		
		<u> </u>			<u></u>							Yes	No	
	-		_											
	-				<u>;</u>		:							
ОТНІ	ER I	DOC	UME	NTS	(:	Inc	lu	ding Aut	hor, Title, Date	, Pert	inent Pages	s, Et	c.)	
	1	Rini, James M. et al. Crystal structure of a human immunodeficiency virus type 1 neutralizing antibody, 50.1, in complex with its V3 loop peptide antigen. Proceedings of the National Academy of Sciences of the United States, Vol. 90, No. 13, 6325-6329 (1993); (Exhibit 1)												
	2	mi	mic	of	tł	ne	ΗI	V-1 V3 1	ucture-based des oop neutralization 1, 31-39 (1997);	on sit	e. Journal			
						_	<u>.</u>			·				
EXAMINER								DATE CONSI	DERED					
									ot citation is in conformand is form with next communica			through	citation if	

Peter D. Kwong, et al. U.S. Serial No. 09/856,200 Filed: January 3, 2003

form	PTO-14	U.S. Department of Commerce Patent and Trademark Office	_	Serial No. 09/856,200							
		OIPE	/JPW/AJM/NS								
(Use several sheets if necessary)  Applicant Peter D. Kwong et											
		NOV 6 5 2004	January 3, 2003								
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)											
	3	Stura, E.A. et al. Crystallization, Crystallographic Data For An Antipep Complexes With The Principal Neutralizin Proteins: Structure, Function, and Gene (1992); (Exhibit 3)	Sequence and tide FAB 50.1 g Determinant of tics, Vol. 14, No	Preliminary and Peptide HIV-1 GP120. . 4, 499-508							
		Oxford, J.S. et al. New Scientific De Vaccine: report on a workshop organized Novel approaches to AIDS vaccine devel Pasteur, Paris. Vaccine, Vol. 14, No. 14)	by EU programme opment held at t	EVA entitled the Institut							
		Sanejouand, Y-H. On the role of CD4 conf cell fusion process. Comptes Rendus De Sciences. Serie III. Sciences De La Vi (1997); (Exhibit 5)	es Seances De L'	Academie Des							
	6	Wyatt, R. et al. The Antigenic Structur Glycoprotein. Nature. Vol. 393, 705-711	<b>~</b> -	-							
	7	Kwong, P. D. et al. Structure of an HIV of Complex with the CD4 Receptor and a Nature, Vol. 393, 648-659 (1998); (Exhi	Neutralizing Huma								
	8	Partial European Search Report, August Office on European Patent Application N		_							
*EYAM1	NER. Initia	l if reference considered, whether or not citation is in conforman	nce with MDED AND. Deau line	through citation if							
		e and not considered. Include copy of this form with next communication									